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Children's Tuberculosis Clinic.—In Newcastle-upon-Tyne, where there was always a high tuberculosis mortality, a clinic was established for children under 5 years of age who had contact with tuberculosis. The object was to obtain information concerning mortality and morbidity of tuberculosis in children from families containing a notified case of the disease, and to ascertain the relation which this bears to the total mortality and morbidity for the same age group within the city. The clinic resembles closely the diagnostic clinic for childhood tuberculosis suggested in the British Paediatric Association Report in 1943. The present report covers the period from June, 1941 to December, 1945. The work is carried on in a special clinic established in the children's department in Newcastle-upon-Tyne General Hospital. Parents are more willing to bring young children to such a clinic than to a tuberculosis dipesnsary. All contact children are tuberculin-tested and X-rayed. Tram or bus fares are paid when this seems necessary in order to get the children to the clinic. Only about 10 per cent of the notified patients have failed to report for examination. For a more detailed working plan, one is referred to the original article. From June, 1941 to December, 1945, 569 children were listed, of whom 520 were examined at least once. Half of the children in contact with "open" tuberculosis were positive, and one-fifth of those in contact with "closed" pulmonary cases were positive at the first examination. Thirty-five subsequently converted. Of the 142 positive reactors at the first examination, 110 were contacts of known sputum-positive cases, and 32 were contacts of negative cases. Of 227 negative reactors, 103 were contacts of sputum-positive cases, and 124 of sputum-negative cases. The author believes that nothing can be done in hospitals for children with symptomless primary tuberculosis which cannot be done in a good home. The only reasons for admission to a hospital are unfavorable home conditions or the absence of any good method of separation from infection. Of the 369 children who had been in contact with pulmonary tuberculosis, 57 were admitted to hospitals because of symptoms or for other good reasons. An additional 8 were admitted with acute disseminated tuberculosis or tuberculous meningitis. The mortality of this same group of 369 children exposed to pulmonary tuberculosis has been 5 per cent up to the end of 1945; this figure is high enough to make use of the word "benign" in connection with childhood tuberculosis a very dangerous one. Thus in 320 families containing an adult with pulmonary tuberculosis, there were at least 21 deaths of young children during a period of four and one-half years. The risk of exposure is greatest in the first year, and there is a marked decrease after the age of 2. Examination of 19 children who died showed that 9 had been tuberculin-negative at the first examination, and 8 of these were under 2 years of age. It was estimated that the provision of sufficient beds during a four and one-half year period would cost, apart from establishment and capital charges, approximately 4,000 pounds a year. The foster-parent scheme would cost approximately 3,000 pounds a year, but it would be difficult to obtain enough suitable foster parents. The institution might also be used while BCG was being given to tuberculin-

negative children, their stay being limited to the period of development of sensitivity.—*Work of a Tuberculosis Contact Clinic for Young Children, 1941–5, F. J. W. Miller, Brit. M. J., July 19, 1947, 4515: 91.*—(*R. W. Clarke*)

Bovine Tuberculosis in Argentina.—In order to determine the prevalence of human tuberculosis of bovine origin in Argentina, 226 specimens from different places were examined. The bovine type of the tubercle bacillus was identified 13 times (5.75 per cent) and an intermediate type 27 times (11.9 per cent). In 5 of the 13 patients nonpulmonary tuberculosis and in the other 8 pulmonary tuberculosis was present. The presence of intermediate forms is probably significant, as most workers assign a bovine origin to this type. (Bovine tuberculosis was first identified in Argentina by Lignieres in 1904 in one of 6 children with intestinal tuberculosis and fed with cow's milk.)—*La tuberculosis humana de origen bovino en la Argentina, A. R. Arena & A. Cetrángolo An. Cáted. de pat. y clín. tuberc., June, 1946, 8: 36.*—(*A. A. Moll*)

Tuberculosis in Brazil.—In 6 of the 14 state capital cities in Brazil, tuberculosis ranks as the leading cause of death, in 6 others it occupies the second place, and in 2 the third place. Taking the 14 cities together, tuberculosis claims top place. It also leads in the North, Eastern and Southern areas of the country, and is exceeded only by infantile diarrhea and enteritis in the Northeastern area and barely outclassed by heart disease in the Central West region. In the Federal District (Rio de Janeiro), tuberculosis, with 19,295 deaths and 18.6 per cent of the general death rate, had first place in the 1943–1945 three-year period, exceeding heart disease, which is credited with 16,545 deaths and 16 per cent of the general death rate during the same span of time.—*A Tuberculose como causa de morte em algumas capitais Brasileiras, R. de Paula Souza, A. Galdino & R. Albuquerque, Rev. brasil. de tuberc., March–April, 1947, 16: 99.*—(*A. A. Moll*)

Primary Tuberculosis in a Slum District.—Among children in a slum district in one of the Rio de Janeiro beaches, superinfection due to overcrowding and promiscuity became the most important factor in the development and spread of severe types of primary tuberculosis. A roentgenographic survey disclosed, among 897 infants and children, 65 cases (7.2 per cent) of tuberculosis, as compared to 11 cases (3.2 per cent) among 327 children in an adjoining, but much more hygienic, housing project. Primary cases were found even among infants and their proportion reached 13.8 per cent among children one to 6 years old in the slum, as compared to 5.1 per cent in children of the same age in the housing project. While discrete types prevailed among the latter children, the rate decreased to 29.2 per cent in the slum group, the rest being severe types of the disease. The size of the problem may be gathered from the fact that about 400,000 persons live at Rio under such slum conditions.—*Formas de tuberculose de primo-infecção encontradas em crianças de uma favela do Rio de Janeiro, R. de Paula Souza, E. Arruda do Nascimento & A. Cerqueira Alvim, Rev. brasil. de tuberc., March–April, 1947, 16: 117.*—(*A. A. Moll*)

Nonpulmonary Tuberculosis in Mexico.—Although admittedly incomplete, the data on nonpulmonary, and incidentally also pulmonary, tuberculosis in Mexico reflect accurately the changes in the tuberculosis situation. During the last twenty-five years the rate of nonpulmonary tuberculosis has decreased about twice as much as the general tuberculosis and the pulmonary tuberculosis rates. While the latter have revealed but little change in their ups and downs, the death rate for nonpulmonary tuberculosis has moved more violently and in opposite direction to the other two. It increased in the 1930–1939 period and has decreased since. The decrease, however, is not general or uniform, as the nonpulmonary tuberculosis death rate is increasing in women—perhaps due to a greater participation in industry—and also in the 5–9 year and 10–14 year age groups. Probably

because of improved diagnostic methods, there is also an apparent increase in such types of nonpulmonary tuberculosis as affect the spine, the peripheral lymph nodes and the urogenital system. Death rate for tuberculosis of all types in Mexico in 1944 averaged 50 per 100,000 and for nonpulmonary tuberculosis about 5 per 100,000. Figures for 1945 were even lower. The so-called Northern and the Yucatan areas are still having high nonpulmonary tuberculosis death rates (above 10 per cent of the total tuberculosis death rate). The North and Central Pacific regions come next and the South Pacific areas, especially Chiapas and Oaxaca, last of all (less than 5 per cent). Altogether, 9 of the 33 States and Territories still have nonpulmonary tuberculosis death rates exceeding 10 per cent of the total tuberculosis rate. Most prevalent nonpulmonary types are alimentary (2.38 per 100,000), meningeal (91.2), miliary (0.66) and Pott's disease and lymph node tuberculosis (about 0.4 each). In 1944, rates in women were higher than in men in the age groups 15–39 years and 60 and over. Mexico is now apparently in the arrested nonprogressive detuberculization phase of the disease, calling for a more intensive effort to prevent epidemic flare-ups.—*Mortalidad por tuberculosis extrapulmonar en la República Mexicana, I. Cosio Villegas & C. Diez Fernández, Rev. mex. de tuberc., July, 1947, 8: 281.*—(*A. A. Moll*)

Tuberculosis in Uruguay.—Tuberculosis deaths in Uruguay in 1944 totaled 2,470 (110.5 per 100,000), 2,176 (94.5 per 100,000) belonging in the pulmonary group. Tuberculosis is causing 12.4 per cent of the general mortality, being exceeded only by heart disease and cancer as a cause of death. The proportion of deaths among men from tuberculosis is 54.2 per cent, and the male sex leads at all age groups with the exception of the 15–29 year group (in which the tuberculosis death rate is 50 per cent larger for women) and the 0–14 year group (in which the rate is equal for both sexes). Uruguay has 3,000 beds for tuberculous patients and construction under way will raise the total to 5,000, that is, 2 beds per death. This will place Uruguay ahead of all other countries in Latin America. Other adverse factors remain uncontrolled. One-eighth of the population (over 250,000 persons) still live in unhealthful dwellings; wages are still inadequate in many cases; social security measures have been barely attempted. Mass surveys should be extended and BCG used on a larger scale. Klebanov's recent account of its success in Russia shows better than any previous report what tuberculosis vaccination can accomplish.—*Consideraciones sobre la lucha antituberculosa actual, P. Purriel & A. A. Piaggio, Hoja tisiol., June, 1947, 7: 74.*—(*A. A. Moll*)

Tuberculosis Epidemic.—Three years of observation following an epidemic outbreak of tuberculosis in a state school for young girls in Denmark have indicated that the tuberculin-negative group was the most seriously affected. Three hundred sixty-eight pupils between 12 and 18 years of age were exposed to a teacher whose apex was found to contain a cavity and whose sputum was occasionally positive during the course of an upper respiratory infection. Of the 94 tuberculin-negative girls who were exposed to the infection, 70 became positive reactors. Thirty-seven (58.6 per cent) of these showed the presence of tubercle bacilli in gastric lavage specimens and 36 showed definite pathological roentgenological changes in chest films. Progressive pulmonary tuberculosis subsequently developed in 6 of these invertors, one of whom died; the others received pneumothorax treatment. Other evidences of primary infection were erythema nodosum in 8 cases, pleurisy (three to eleven months after the infection) in 10 cases, pericarditis in one case and peritonitis in one case. The primary infiltrations were found chiefly in the infraclavicular region and in the middle lung field, appearing about three months after the infection. Among the 106 BCG-vaccinated pupils who were exposed to the infection, 2 cases of pulmonary tuberculosis appeared about one year after the exposure. One hundred and five tuberculin-positive girls were exposed, of whom 4 de-

veloped clinical disease with positive gastric lavage, although 2 of these girls may have suffered an endogenous reinfection rather than a superimposed infection.—*Epidemic of Tuberculosis in a State School, T. V. Hyge, Acta tuberc. Scandinav., 1947, 21: 1.*—(*P. Q. Edwards*)

Tuberculosis Epidemic.—A 20-year-old maid-servant with active tuberculosis was responsible for an epidemic of the disease in two different communities in the Faroe Islands. The first group of cases occured in the hotel where she was employed for five months. Twenty-seven people with whom she had contact were examined. Twelve tuberculin-positive persons showed no evidence of disease while of 15 tuberculin-negative contacts, only 2 stayed negative. The 13 convertors (changed from negative to positive on tuberculin test) were the people in whom active disease was found: 4 had initial fever only, 2 had initial fever and pleuritis and 3 had pleuritis only. When this girl was found to be ill, she was sent to a hospital where the diagnosis of active tuberculosis with positive sputum was made. Within two weeks she was transferred to a sanatorium, although during that brief period of time 9 cases of tuberculosis were contracted to be discovered within the next several months. All 9 of these cases had been tuberculin-negative prior to their association with the girl. All converted and several different types of disease were manifested as the primary infection: initial fever, 4; initial fever and pleuritis, 2; initial fever and meningitis, 2 (both died); initial fever and pleuritis and meningitis, 1 (died). BCG is now being given to all people with negative tuberculin reactions, since about 50 per cent of the adults on Faroe Islands are negative reactors.—*A Tuberculosis Epidemic on the Faroe Islands, A. Poulsen, Acta tuberc. Scandinav., 1947, 21: 58.*—(*P. Q. Edwards*)

Tuberculosis in Unexpected Deaths.—In 1,332 postmortem examinations from the Medical Examiner's Office of Manhattan (1,038 white persons and 294 Negroes), tuberculous cavities were found in the lungs of 61 (4.58 per cent). In only 6 of these had the diagnosis of tuberculosis been made clinically. In Negroes there was little difference in relation to sex; in white persons tuberculous cavities were 7.7 times more frequent in males than in females. Forty-nine of the 61 persons with cavities were white males, 45 of whom were over 40 years of age. In 87 per cent of the cases the cavities were in the upper lobes. Sixteen persons (between 22 and 68 years of age) presented progressive primary tuberculosis; 27 persons (between 33 and 76 years of age) had healed primary infection and progressive new disease; in 18 patients there was progressive disease of an indeterminate nature.—*Incidence of Tuberculous Pulmonary Cavities in Unexpected Deaths Investigated at Necropsy, E. M. Medlar, Arch. Int. Med., September, 1947, 80: 407.*—(*G. C. Leiner*)

Positive Gastric Lavage and Infectiousness.—Because there is still considerable difference of opinion in academic circles about the actual infectiousness of gastric-lavage-positive people, a study was undertaken in Sweden to ascertain exactly how many new tuberculin-positives can be traced to a gastric-positive person. Environment groups were used for this study, family, contact and work-place environments being included for each of three series: gastric-negatives, gastric-positives and sputum positives. Results clearly show a significantly higher incidence of contact infection in the sputum-positive environment than in the other two. No significant difference was found in the contacts with the gastric-positive and gastric-negative groups. Gastric-lavage-positives are thus shown to be non-infectious. These investigations further show that there is no difference in the risk of infection from gastric-lavage-positives if the source of infection is a primary or a post-primary, or if the carrier is a child or an adult. Warning is given to be sure that every gastric-positive case is not likewise sputum-positive before informing him of his non-infectiousness.—*Is There Any Risk of Infection from Gastric-lavage Positives? L. Bluhm, Acta tuberc. Scandinav., 1947, 21: 70.*—(*P. Q. Edwards*)